

BEFORE THE OFFICE OF THE COMMISSIONER OF RAILROADS

STATE OF WISCONSIN

On the Commissioner's Own Motion for a Determination of the Adequacy of Warning Devices at the Grade Crossing of the Wisconsin Central Ltd. Tracks with CTH 'M' (Military Road) in the Village of Sherwood, Calumet County

9164-RX-579

FINDINGS OF FACT AND ORDER

On December 30, 2004, the Commissioner of Railroads directed the staff of the Office of the Commissioner of Railroads (OCR) to investigate the adequacy of warning devices under §195.28, Stats., at the grade crossing of the Wisconsin Central Ltd. (WCL) tracks with CTH 'M' (Military Road) in the Village of Sherwood, Calumet County (Crossing No. 386 694X / MP 11.95).

An OCR investigator inspected the crossing. No hearing was held.

Findings of Fact

THE COMMISSIONER FINDS:

CTH 'M' (Military Road) is 43' wide in the vicinity of the crossing and intersects the railroad tracks at an angle of about 75°. The roadway carries two traffic lanes, one in each direction. CTH 'M' (Military Road) carried an average daily traffic (ADT) of 1500 according to 2004 DOT records at a legal speed limit of 35 mph.

The WCL operates 4 train movements per day over the crossing at a timetable speed of 35 mph. The crossing consists of one mainline track.

A motorist traveling at 35 mph requires a safe stopping distance of 281'. The crossing warning devices are visible from more than 281' in each direction. Assuming a train speed of 35 mph, a motorist traveling at 35 mph needs to see a train when it is about 370' from the crossing from a point 281' down the highway. The corner sight distance is badly obstructed by buildings in the southeast and southwest quadrants.

The exposure factor at this crossing is 6000. The exposure factor equals the product of the number of trains per day and the number of highway vehicles per day, which yields a numerical value for the potential conflicts each day at the crossing.

No train-vehicle accidents have occurred at this crossing since 1973.

The Wisconsin Department of Transportation has produced a benefit-cost analysis for all at-grade crossings in the state. Installing new automatic flashing lights with gates and constant warning time circuitry at the CTH 'M' (Military Road) crossing has a net benefit of about \$93,000.

Accidents that do occur here will likely be quite serious if a through train is involved due to their 35 mph speed. Train speed is strongly correlated with fatalities in train/vehicle accidents.

The crossing is presently protected with post-mounted 8" incandescent automatic flashing lights. The existing warning devices are inadequate. The existing warning devices will be adequate until such time as the new warning devices are installed. In order to adequately protect public safety post-mounted 12" LED automatic flashing lights with gates are needed. Cantilevered signals are not needed despite the 43' roadway width because there are only two lanes of traffic and parking does not occur in the immediate approaches to the crossing.

*Light emitting diodes (LED)* lamps replace incandescent bulbs. LEDs have higher conspicuity, a wider cone of vision, and longer life than incandescent lights. LEDs are especially useful on east-west roadways where the rising and setting sun may make the signals difficult to see.

**Source of funding:** The signal materials and installation shall be paid from OCR safety funds.

#### Conclusion on the Issue

##### THE COMMISSIONER CONCLUDES:

That in order to adequately protect and promote public safety, it is necessary to install and maintain 12" LED automatic flashing lights with gates and constant warning time circuitry at the crossing of the tracks of Wisconsin Central Ltd. with CTH 'M' (Military Road) in the Village of Sherwood, Calumet County.

#### Conclusion of Law

##### THE COMMISSIONER CONCLUDES:

That the jurisdiction of the Office of the Commissioner of Railroads under §195.28, Stats., extends to this matter. Accordingly, the Office enters an order consistent with the findings of fact.

#### Order

##### THE COMMISSIONER ORDERS:

1. That the **Wisconsin Central Ltd.** shall install and maintain 12" LED automatic flashing lights with gates, and constant warning time circuitry with appropriate appurtenances in accordance with such plans as are filed with and approved by the Office of the Commissioner of Railroads at the crossing of its tracks with **CTH 'M' (Military Road)** in the Village of Sherwood, Calumet County by **December 31, 2008** (Crossing No. 386 694X / MP 11.95).

2. That the **Wisconsin Central Ltd.** shall submit to the Office of the Commissioner of Railroads signal and circuit plans with the cost estimate of its proposed installation and upon completion of the signal project, a detailed statement of the actual cost to the Office and to the Wisconsin Department of Transportation.

3. That the signal installation work herein ordered shall not begin until the district office of the Wisconsin Department of Transportation informs the railroad that they may start such work and such start notice will not be issued until appropriate federal aid or other funding arrangements have been assured. The cost of the new project initiated before the start notice will not be reimbursed with public funds and shall be the responsibility of the railroad.

4. That to the extent feasible the **Wisconsin Central Ltd.** shall re-use the existing signal equipment.

5. That the **Wisconsin Central Ltd.** shall bear no part of the cost of the crossing signals installation, except for any cost assessed to the railroad pursuant to §195.60, Stats., for the investigation of this matter by the Office. The railroad shall not pass on those assessment costs either directly or indirectly.

6. That if the petitioner, railroad or any interested party objects to this order and requests a hearing within 20 days of the date of this order in writing, the Office will hold a public hearing.

7. That jurisdiction is retained.

Dated at Madison, Wisconsin, (February 27, 2006).

By the Office of the Commissioner of Railroads.

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Rodney W. Kreunen  
Commissioner of Railroads

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